5

10

ABSTRACT OF THE DISCLOSURE

A method and apparatus selects forward error correction parameters in a channel having a plurality of subchannels in a multicarrier communications system. A signal-to-noise ratio representing a subset of the subchannels is determined. A number (s) of discrete multi-tone symbols in a forward-error-correction frame, a number (z) of forward-error-correction control symbols in the discrete multitone symbol associated with the signal-to-noise ratio, a number of subchannels associated with the signal-to-noise ratio, and a net coding gain for different values of s, z, signal-to-noise ratios and numbers of subchannels is stored in a table. Forward error correction parameters of the channel are selected based on the net coding gain by applying an approximation to a subset of values in the table.